

dration-\$12,100 chemotherapy administration). For children 10–14 years, affective psychoses had the longest LOS (mean LOS=7.5 days; range: 1.6 acute appendicitis–4.5 chemotherapy administration), and chemotherapy administration had the greatest cost (mean cost=\$13,295; range: \$3,790 asthma with acute exacerbation–\$11,999 acute appendicitis). **CONCLUSIONS:** Children in the US are hospitalized for a variety of reasons, with respiratory illnesses (i.e., pneumonia, asthma, and bronchiolitis) being common in all age groups. The LOS associated with the most common reasons for hospitalization is typically short with mean costs not exceeding \$14,000.

PHS33

DIRECT MEDICAL COST OF COMPLICATIONS IN PATIENTS WITH NON VALVULAR ATRIAL FIBRILLATION NVAF AT A PRIVATE HOSPITAL IN VENEZUELA

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OBJECTIVES: Estimate direct medical costs of selected acute complications in patients with non-valvular atrial fibrillation (NVAF) at a private hospital “Clínica Santa Sofía” in Venezuela. **METHODS:** The hospital’s Medical Statistics Department was used to identify the study population. CIE-10 codes were used to identify patients with NVAF and select complications of AF. Complications of interest are: ischemic stroke, hemorrhagic stroke, systemic embolism, myocardial infarction, gastrointestinal hemorrhage and non-neurological hemorrhage. All cases from 2012–2013 meeting the inclusion criteria were reviewed. Patient level data from clinical charts was extracted to estimate resource utilization per patient per event. Costs were estimated using the hospital’s 2014 tariffs and expressed per patient in 2014 Bolivares Fuertes (BsF). **RESULTS:** Mild and moderate ischemic stroke costs were estimated at BsF 79,114 (SD 103,903), BsF 90,266 (SD 97,934). One case of mild, and one case of moderate ischemic stroke consumed high healthcare resources in this study population. Only one case of severe fatal ischemic stroke was identified and costs were estimated at BsF 14,143. No hemorrhagic stroke events were collected. Systemic embolism and myocardial infarction costs accounted for BsF 79,846 and BsF 36,332 (SD 13,865) respectively. Gastrointestinal hemorrhage was estimated at BsF 16,229 (SD 1,841) and only 1 event of non-neurological hemorrhage was collected and costs estimated at BsF 8,864. **CONCLUSIONS:** Direct medical costs for NVAF patients at this private hospital increase as the severity of the event. High variability in costs was observed. Estimating these costs could help clinicians and decision makers a better understanding on the importance of preventing these complications with adequate NVAF treatment.

PHS34

DIRECT COSTS OF HEALTHCARE OF MULTIPLE SCLEROSIS, THE CASE OF A HEALTH MAINTENANCE ORGANIZATION IN COLOMBIA

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Multiple sclerosis (MS) is an inflammatory demyelinating disease of central nervous system. It affects more than 1 million people in the world and the estimated prevalence in Colombia is of 4 to 5 per 100,000 inhabitants. It is a high cost disease and the drugs for its treatment were included to the benefit plan of health system since 2014. **OBJECTIVES:** Estimate the direct costs associated with the health care of patients with MS insured with a health maintenance organization (HMO) in Colombia during the period 2010–2014. **METHODS:** A retrospective cross-sectional study was conducted in a cohort of 163 patients distributed in 13 cities of the country and affiliated with a HMO in Colombia during January 2010 to December 2014. Demographic characteristics of the cohort are described and the average annual costs were estimated by health service and patient. Costs were adjusted for inflation and expressed in 2014 US dollars. **RESULTS:** The prevalence of MS was 7.85 per 100,000 persons, the 69.94% were female, the mean age was 40.91 years (SD 12.57 years), and cities with higher concentrations of patients were Bogotá (47%), Barranquilla (16%) and Medellín (9%). The average annual cost of care for the 163 patients was \$ 2,663,500.79, mainly because drugs (85.39%), followed by diagnostic and therapeutic procedures (8.58%), magnetic resonance (1.21%), hospitalization (1.19%) and specialized consultations (0.92%). The average annual cost per patient was \$ 21,303.43 (2010), \$ 17,842.61 (2011), \$ 22,327.09 (2012), \$ 22,662.90 (2013) and \$ 20,205.28 (2014). **CONCLUSIONS:** The average annual cost per patient of MS in an insured population in Colombia corresponds to the annual premium per capita of 68 patients by 2014. Despite the change of technology in the pharmacological treatment of these patients, there was not a significant increase in health care costs during the follow.

PHS35

INCREMENTAL BURDEN OF GROUP 3 PULMONARY HYPERTENSION PATIENTS TO U.S. PAYER

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OBJECTIVES: Pulmonary hypertension (PH) is classified into 5 groups. Group 3-PH is PH associated with lung diseases, such as chronic obstructive pulmonary disease (COPD), interstitial lung diseases (ILD), or those associated with sleep-related breathing disorders. We estimated the burden of Group 3 PH patients to US payers. **METHODS:** A 1:1 case-control study design using a large health insurance claims database was employed. Group 3-PH patients were identified using the following inclusion criteria: ≥ 2 medical claims for PH during July 1 2011 through June 30 2012; at least one procedural claim for echocardiogram or right heart catheterization, and at least one medical claim for COPD, ILD, breathing sleep disorders, alveolar hypoventilation disorder, chronic exposure to high altitude, or developmental lung diseases. Patients were excluded if they had a medical claim for left heart disease, pulmonary embolism, hematologic disorders, systemic disorders, metabolic disorders or other categories as described in the 2013 classification of PH anytime during

the study period. Controls were selected based on a propensity score methodology ensuring exactly the same baseline lung disease distribution between the 2 groups and no medical claim for PH across the entire study period. **RESULTS:** A total of 2,236 cases met study criteria. On average, cases were significantly ($p < 0.01$) younger (67 vs. 71), more females (64% vs 58%) and higher comorbid burden (2.8 vs 2.09) compared to controls. After adjusting for all baseline characteristics cases had significantly higher ($p < 0.001$) inpatient admissions (5.0 vs 2.4), physician office visits (16.5 vs 12.5), emergency room visits (0.7 vs 0.5), pharmacy claims (67 vs 54). This translated into higher expenditures among cases (\$42,914) vs controls (\$16,745) at per patient per year level. **CONCLUSIONS:** Using health plan data this study showed that Group 3-PH poses a significant economic burden to payers.

PHS36

HOSPITALIZATION COSTS DUE TO SEVERE ACUTE RESPIRATORY INFECTION (SARI) IN THREE CENTRAL AMERICAN COUNTRIES

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OBJECTIVES: To estimate the direct medical costs of severe acute respiratory infection (SARI) in children and adults from three Central American countries with a bottom-up costing approach. **METHODS:** The costs of inpatients treatment were estimated through the retrospective bottom-up costing in a randomized sample of clinical records from SARI patients treated in teaching tertiary hospitals during 2009–2011 period. Activities incurred per patient were registered and a setting-specific cost per activity was acquired. Average cost per patient in the group of children and elderly adults was estimated for each country. In Nicaragua, only the pediatric population was included. Costs were expressed in local currency (2011), American dollars, and international dollars (2005) for country comparison. **RESULTS:** The care cost per case in children in Guatemala was the cheaper (I\$971.95) compared to Nicaragua (I\$1,431.96) and Honduras (I\$1,761.29). In adults, the treatment cost for Guatemala was the more expensive: I\$4,065.00 vs. I\$2,707.91 in Honduras. **CONCLUSIONS:** Bottom-up costing of SARI cases allowed the mean estimates per treated case that could have external validity for the target population diagnosed in hospitals with similar epidemiological profiles and level of complexity for the study countries. This information is very relevant for the decision-making.

PHS37

RACIAL VARIATION IN THE CLINICAL AND ECONOMIC BURDEN OF SKELETAL-RELATED EVENTS AMONG ELDERLY MEN WITH STAGE IV METASTATIC PROSTATE CANCER

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OBJECTIVES: To investigate racial disparities in the incidence of skeletal-related events (SREs) and healthcare utilization costs associated with SREs among older African American (AA) and non-Hispanic White (NHW) men with advanced prostate cancer (PCa). **METHODS:** We identified men aged 66 or older, diagnosed with stage IV metastatic PCa between 2000 and 2007 from the SEER-Medicare dataset. Three mutually exclusive SRE categories were created for pathologic fracture (PF), spinal cord compression (SCC), and bone surgery (BS). Multivariable logistic regression models were used to assess the relationship between SREs and race, controlling for other demographic, clinical, and treatment characteristics. The annual unadjusted post-SRE healthcare utilization costs included total monthly costs in the 12-month post-period relative to the first SRE. Difference-in-difference estimates were derived in a propensity score matched sample to obtain annual adjusted SRE-specific costs. We estimated unadjusted post-SRE and adjusted SRE-specific cost differences between AA and NHW men. **RESULTS:** Application of inclusion criteria resulted in 6,455 metastatic PCa patients with 1,035 AA and 5,420 NHW men. A higher proportion of NHWs (16%) experienced SREs compared to AAs (13%) ($p < 0.01$). The likelihood of experiencing SREs among AAs was lower than in NHWs after adjusting for individual characteristics (OR: 0.81, 95%CI: 0.68–0.96, $p = 0.02$), specifically due to the lower likelihood PF and BS events among AA men. The unadjusted post-SRE costs among AAs were US\$12,962 (95%CI: US\$3,995–US\$21,930; $p < 0.01$) higher compared to NHW men. However, the adjusted SRE-specific cost differences between AA and NHW men were not statistically significant. The adjusted SRE-specific costs were US\$35,725 (95%CI: US\$22,190–US\$49,260) among AAs, and US\$25,896 (95%CI: US\$21,669–US\$30,123) among NHWs. SRE-specific costs varied by SRE type, with BS costing more than PF and SCC events. **CONCLUSIONS:** Even though AA men were less likely to experience SREs than NHWs, the observed trend towards higher costs in advanced PCa care among AA men highlight the need for further research with larger, racially diverse samples.

PHS38

COST OF COLORECTAL CANCER IN VIETNAM

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OBJECTIVES: Colorectal cancer (CRC) is the third most common cancer in both male and female in the world. Therefore, CRC causes the high economic burden for both patients and society. Understanding the cost of CRC is necessary to conduct the relevant healthcare policies, especially in Vietnam. This is also the aim of this study. **METHODS:** A decision tree model was built to analyze the cost of each stage based on the National Comprehensive Cancer Network Guideline in 2013. The average cost of CRC was evaluated by using the following formula: COI = DC + IC. In which: COI - cost of illness, DC - direct cost, IC - indirect cost. The analysis was